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CLEAN SET OF PENDING CLAIMS

47. A process for obtaining a protein heterologous to yeast as a product of yeast expression, which process comprises:

- (a) transforming a yeast organism with an expression vehicle comprising a promoter sequence for yeast alpha factor operably connected to a DNA sequence encoding a protein heterologous to the yeast organism;
- (b) culturing the transformed organism; and
- (c) recovering the protein from the culture.

48. A process for obtaining a protein heterologous to yeast as a product of yeast expression, which process comprises:

- (a) transforming a yeast organism with an expression vehicle comprising a DNA sequence encoding a pre-pro peptide of yeast alpha factor operably connected in translation reading frame to a DNA sequence encoding a protein heterologous to the yeast organism;
- (b) culturing the transformed organism; and
- (c) recovering the protein from the culture.

49. A process for obtaining a protein heterologous to yeast as a product of yeast expression, processing and secretion, which process comprises:

- (a) transforming a yeast organism with an expression vehicle comprising a DNA sequence encoding a pre-pro peptide of yeast alpha factor operably connected in translation reading frame to a DNA sequence encoding a protein heterologous to the yeast organism;
- (b) culturing the transformed organism; and
- (c) recovering the protein from the culture.

50. A process for secreting a protein heterologous to yeast into the supporting medium, which process comprises:

- (a) transforming a yeast organism with an expression vehicle comprising a DNA sequence encoding a pre-pro peptide of yeast alpha factor operably connected in translation reading frame to a DNA sequence encoding a protein heterologous to the yeast organism;
- (b) culturing the transformed organism; and
- (c) recovering the protein from the culture.

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51. The process of Claim 50, wherein said DNA sequences are under the control of the alpha factor promoter.

52. A yeast expression vehicle comprising a DNA sequence of the promoter for yeast alpha factor operably connected to a DNA sequence encoding a protein heterologous to the yeast organism.

53. The expression vehicle of Claim 52, further comprising a DNA sequence encoding a pre-pro peptide of yeast alpha factor operably linked in translation reading frame upstream to the DNA sequence encoding a mature protein heterologous to the yeast organism.

54. A yeast expression vehicle comprising a DNA sequence encoding a pre-pro peptide of yeast alpha factor operably linked in translation reading frame to a DNA sequence encoding a mature protein heterologous to the yeast organism.

55. The expression vehicle of Claim 52, wherein the DNA encoding the heterologous protein encodes a protein selected from the group consisting of human interferon, bovine interferon, tissue plasminogen activator, and rennin.

56. The expression vehicle of Claim 53, wherein the DNA encoding the heterologous protein encodes a protein selected from the group consisting of human interferon, bovine interferon, tissue plasminogen activator, and rennin.

57. The expression vehicle of Claim 54, wherein the DNA encoding the heterologous protein encodes a protein selected from the group consisting of human interferon, bovine interferon, tissue plasminogen activator, and rennin.

58. A yeast organism transformed by the expression vehicle of Claim 52.

59. A yeast organism transformed by the expression vehicle of Claim 53.

60. A yeast organism transformed by the expression vehicle of Claim 54.

61. The protein produced by the process of Claim 47.

62. The protein produced by the process of Claim 48.

63. The protein produced by the process of Claim 49.

64. The protein produced by the process of Claim 50.